

## Building Administration Report

Gerry Van Derlaske  
NSLS Building Manager

Nearly 25 years since first commissioning the VUV ring, the NSLS remains one of the most widely visited research facilities in the DOE complex. Previous large-scale construction projects have been replaced with building upgrades, which have been taking place during monthly maintenance sessions and scheduled shutdown periods. As always, the experimental halls remain a hotbed of activity, as many trades groups, technicians, scientists, staff members, and visitors work side by side conducting cutting-edge research in a safe and efficient manner. Staff and users are asked to report concerns that may arise regarding safety or security issues to any NSLS staff member. We do appreciate having others act as our eyes and ears. Contacts may be reached via phone, e-mail, or in person. Our aim is to provide a safe and secure environment for carrying out quality scientific research programs.

### Work Planning and Controls for Maintenance and Operations

Overseeing the work-planning and work-permit process for safety and controls for a majority of the work being accomplished within the facility now resides with Al Boerner, Operations Division, who assumed the position of NSLS work control manager in January 2005. In keeping with the effort to have all work planned and properly reviewed prior to the commencement of tasks, several programs and training modules have been implemented to assure a safe and consistent application of the work-planning process. The work control manager, assisted by many work control coordinators, ensures that proper work planning policy is followed by both in-house staff and NSLS users.

### Material Handling and Overhead Hoists

Due to serious events across the DOE sites, material handling devices, overhead cranes, and below the hook lifting devices were given a high priority for assessment regarding compliance, inventory tracking, and inspections. At the NSLS, the point of contact for all material handling/ hoisting and lifting devices is Robert Kiss. During this assessment period, new training requirements were developed, responsible individuals were named for each of the overhead cranes, and administrative locks were placed on overhead cranes to prevent use by unauthorized individuals. These programs were established to create a safe and consistent policy for our staff and users of material-handling and lifting devices. All below-the-hook devices, such as slings, shackles, and lifting fixtures, are required to be inspected on an annual basis and inventoried into our database, along with being assigned to a responsible individual. This program also applies to the purchase of any lifting device for use at BNL. Prior to submitting an order to purchase any lifting device, the device should be reviewed by BNL Quality Assurance to check its compliance with the applicable American National Standards Institute (ANSI) requirements.

### Changes in the Experimental Halls

The changing landscape of the x-ray experimental hall is most dramatically noticed as one proceeds past the control room towards the LEGS facility. Over the course of the year, various groups have worked together to "green field" the X3 beamline area, preparing for relocation of the PRT from the Case Center for Synchrotron Biosciences from beamline X9.



During 2005, Stony Brook University beamline components and staff were moved from the existing X3 beamline to new quarters at X16. Green fielding of the X3 area began after X16 was commissioned and user operations were initiated. Major reconstruction of the X3 area will take place in 2006, in preparation for the Case PRTs' move.

### Fall Arrest Protection Equipment

NSLS compliance with OSHA regulations prompted various groups to assess their needs and enhance worker safety when performing tasks at elevated heights. In an effort to mitigate falls from heights, the NSLS safety group, coupled with the NSLS assigned carpenter, installed various fall-protection devices throughout the facility. Areas such as the roofs of experimental end station enclosures (EESes), the exterior build-

ing AC cooling towers, and x-ray saw tooth areas above grade level were the areas of focused attention. Additional areas of concern will be evaluated as they are reviewed during the work-planning sessions, or during Tier 1 inspections.

### New AEDs Installed

Two additional automated external defibrillators (AEDs) have been installed in building 725. Along with the existing AEDs in the main lobby and in the control room area of building 729 (the DUV-FEL facility), there is an AED in the RF power supply area in the center of the x-ray ring, along with the AED adjacent to the north elevator on the second floor. Familiarity with these units and their exact locations could save a co-worker's life. The life saved could be yours!

### HSSD System Installed to Protect the Power Supply Area Electrical Components

Due to funding secured via requests submitted to the general laboratory upgrade process, during the winter 2006 shutdown highly sensitive smoke detectors (HSSDs) were installed in the NSLS power supply area, near the center roll-up doors. These detectors perform numerous air samplings over a short time interval, and can detect very minute signs of possible electrical fires, thereby giving operations coordinators a chance to investigate and shut down equipment prior to an event that would trigger less sensitive smoke-detection equipment. Testing of the system, in order to fine-tune the lowest possible thresholds prior to tripping the sensors that signal the control room, will be conducted as the winter shutdown ends, thereby establishing a real-time, true-test scenario.



Work Control Coordinators (standing from left, back row) Gary Nintzel, Ron Beauman, Mike Buckley, Steve Kramer, Wayne Rambo, Bob Kiss, Nick Gmur, Frank Zafonte, Emil Zitvogel, and Bob Chimel. (Standing from left, middle row) Bob Scheuerer, Payman Mortazavi, Toshiya Tanabe, John Gallagher, John Aloï, Dave Harder, Walter DeBoer, and Tony Kuczewski. (Sitting from left, front row) Randy Church, Al Boerner (Work Control Manager), and Andrew Ackerman (Experiment Review Coordinator). (Missing from photo) Gerry Van Derlaske (Work Control Manager), Mike Schwarz, Mike Fulkerson, Pete Zuhoski, Scott Buda, Gloria Ramirez, Wayne Rasmussen, Conrad Foerster, Anthony Lenhard, Jim Rose, and Peter Siddons.

### ADA Compliant Doors Installed at Facility Entrances

Again, through funding supplied by General Plant Projects, Americans with Disabilities Act (ADA) compliant doors were installed at the main entrances to building 725. The ground-level south and north lobby entrance doors have remote operational "push buttons" identified with the famil-

iar international wheelchair symbol, allowing hands-free passage through the vestibule area. The push-button door switches are keyed into the NSLS card-swipe system for access during evening, holiday, and weekend periods. An additional plus is the ability to have the doors remotely open when one's hands are full.

### NSLS Trailer Park Closes

Without much ado, the fabled NSLS trailer park, located east of Railroad Avenue on the north side of Brookhaven Avenue, is now a memory. Once host to many of the original NSLS user groups who utilized these trailers as both office and technical shop space, the trailers' useful lifetimes have come to an end. Many of the original groups still conducting research at the NSLS have since moved to more pleasant accommodations in building 535. The trailers have been severed from BNL utilities and are no longer considered as space occupied or serviced by the NSLS.

### RF Penthouse Repairs and Upgraded AC Installed

Once again, with the assistance of Plant Engineering Building & Maintenance trades, a major restoration project was accomplished transparently to most NSLS staff and the user community. During several Tier 1 inspections, and from information passed along to the building management team by RF supervisors and technical staff, deficiencies with the structural integrity of the RF penthouse were noted and corrected. During the summer months, when weather permitted, the exterior siding and the sub-flooring of the RF penthouse was replaced without interrupting services to the research program. Original windows were saved for reinstallation, and the sub-floor replaced where water had seeped behind the exterior walls and allowed dry rot to occur. Plant Engineering carpenters worked under tarps to keep the

interior temperatures of the penthouse at a level appropriate to keep the power supplies fully functional. Once the sub-floors were replaced, wet insulation in the walls was replaced and new T-111 exterior siding installed over the failing Dri-vet exterior walls. Painting of the siding to match the remaining Dri-vet siding is planned during the spring of 2006.

NSLS utilities and operations support group staff, in conjunction with varied Plant Engineering groups, continue the process of installing additional cooling capacity within the RF penthouse. This additional supply of cooled, conditioned air will allow a level of redundancy that did not previously exist, which is necessary to prevent "fault conditions," such as those that occur in times of heavy heat loading during peak summer months and during interruptions in service of the chilled-water supply. In the spring of 2006, final connections of the ductwork will take place and the additional cooling is expected to be fully operational.

**Conclusion**

As in past years, we encourage the NSLS staff and user community to keep the building management team abreast of any concerns with the physical plant utilities, the condition of the facilities, and daily quality-of-life issues. We will work to correct these issues as quickly as possible.